Month of issue and page number are shown after article title. First number indicates month of publication; second number indicates date of issue; and third number indicates page on which article appeared.

Index to Volume 61 TELEPHONE ENGINEER & MANAGEMENT

January through December, 1957

ACCOUNTING:

Accountants Look at New Methods, by Richard A. Reynolds, 11-1-43.

How Microfilm Bookkeeping Helps Us Save $4000 per Year, by Robert D. Bonnar, 7-15-52.

Mechanization of Telephone Accounting Job, by Robert P. Reuss, 11-1-47.

Recent Changes in FCC Accounting, by Robert E. Stromberg, 11-1-46.

USITA Accounting Committee Report, by O. M. Westrup, 11-1-43

ACROSS THE EDITOR'S DESK:

1-1-6; 1-15-6; 2-1-10; 2-15-12; 3-15-18; 4-1-14; 4-15-10; 5-1-14; 5-15-10; 6-1-24; 6-15-14; 7-1-14; 7-15-10; 8-1-16; 8-15-10; 9-1-10; 9-15-24; 10-1-22; 11-1-8; 11-15-8; 12-1-8; 12-15-8.

ALASKA:

Alaska Communications System, 6-1-14.

ASSOCIATIONS:

Arkansas Convention Report, 11-15-80. California Convention Report, 8-15-58. Canada Tel. Assoc. Meets, 7-15-61. Florida Independents Meet At Daytona Beach, 2-1-57.

Illinois Independents Meet, 7-15-57. Indiana Association Holds 37th Annual Convention, 6-15-48. Iowa Association Holds Annual Convention, 5-1-51.

Minnesota Independents Meet, 4-15-91. Missouri-Kansas Associations Meet at Kansas City, Kans., 8-15-66. Nebraska Convention Report, 7-15-61. Nelson, J. Earl, Named Secretary, Nebraska Assoc., 7-1-48. New York Independents Meet, 8-15-64. North Carolina Convention Report, 12-1-69. North Dakota Assoc. Holds 49th Annual Meeting, 6-15-48.

Ohio Independents Meet, 6-1-50. Oklahoma Independents Meet, 1-15-58. Oregon-Washington Independents Meet, 8-1-50. Pennsylvania Independents Meet, 9-1-53. Progress Report Issued By Ohio Association, 5-1-59. Rocky Mountain Convention Report, 12-1-65.

South Dakota Independents Meet, 1-15-57. Texas Convention Report, 6-15-43. USITA Accountants Look at New Methods, by Richard A. Reynolds, 11-1-43. USITA Commercial Committee Report, by K. L. Lawson, 11-1-36. USITA Convention Report (60th USITA Convention), by John G. Reynolds, 10-15-51. USITA Engineering Conference Emphasizes Education, by Richard A. Reynolds, 10-15-77. USITA Plans 60th Anniversary Celebration 3-1-58. USITA Plans Smithsonian Exhibit, 2-1-8. USITA Plant Conference Report, by John S. Reed, 10-15-70. USITA Traffic Committee Report, by H. Kleinhammer, 11-1-54. Wisconsin Independents Meet, 7-1-43.

BACK OF THE BOOK, by John G. Reynolds:

1-1-70; 1-15-94; 2-1-86; 2-15-110; 3-1-78; 3-15-110; 4-1-78; 4-15-118; 5-1-78; 5-15-110; 6-1-78; 6-15-102; 7-1-78; 7-15-96; 8-1-78; 8-15-102; 9-1-86; 9-15-118; 10-1-156; 10-15-144; 11-1-80; 11-15-112; 12-1-102; 12-15-102.

BOOK REVIEWS:

"Chilton's 1957 Automobile Repair Manual," 7-1-10. "Driver Manual," 7-1-54. "Electrical Engineering Circuits," 6-15-68. "Establishing An Integrated Data Processing System," 2-15-99. "Handbook of Electronic Measurements," 2-1-62. "Improving The Caliber of Company Management," 1-1-46. "Modern Mathematics For the Engineer," 2-15-69. "Patent Notes For Engineers," 2-1-41. "Recruiting and Selecting Office Employes," 2-15-16. "Small Business Problems," 11-15-46. "Symposium On Minimum Property Values of Electrical Insulating Materials," 7-1-10. "Techniques of Plant Management," 11-15-73. "Transistor Circuit Engineering," 7-1-10.

BOOTHS, Telephone:

Outdoor Booths, (A TE&M Operating Manual) by John S. Reed, 3-1-43; 3-15-55; 4-1-51; 4-15-82; 5-15-59.

BUILDINGS:

Year-Round Air Conditioning at Atlanta, by Andreas A. Patjens, 9-15-47.

CABLE:

Air Conditioned Cables, 7-15-16.

Alaska Submarine Cable Links USA With Alaska, 1-15-68.

Modern Cable Construction, (A TE&M Training Course) by John S. Reed, 2-15-55; 4-1-39; 4-15-58; 7-1-36; 9-15-71.

New All Plastic Switchboard Cable, 6-1-58.

CANADA:

Alberta Government Considers Rural Telephone Loan Plan, 6-15-72. Bell of Canada Reports Station Gains In 1956, 2-15-69. B. C. Tel. Announces Largest Construction Program, 1-1-48; $500,000,000 Program Planned, 12-1-43. Canadian Telephone Industry Reports 4.5 Million Phones, 9-1-62. Rural Phone Mergers Urged In Canada, 12-1-49.

CARRIER:

Carrier School Announced by Panhandle Electric, 5-1-68.

CENTRAL OFFICE:

A Magnetic Amplifier Controlled Charger For Use In 'Floating' Battery Installations, by Eugene H. Clark, 6-1-37.

COMMERCIAL:

Commercial Department Looks Ahead, by Myrle Shafer, 11-1-36. Miss "Telephone Service," by J. R. Yeager, 10-15-92. "Screwdriver Brigade" The Elyria (Ohio) Telephone Co. 3-15-80. Service In Community Dial Offices, by C. A. Martin, 11-15-41.

Taking A Forward Look, by B. C. Ames, 11-1-37.

USITA Merchandising Training Panel, 11-1-39.

COURTS & COMMISSIONS:

Ashland, Mo., Area Dispute Settled By Commission, 10-1-145. Commission Denies Mohawk Petition For Modification of Foreign Attachment Provision, 5-15-78. Commission OK's Rate Boost For Allied Telephone, 6-1-55. FCC OK's Amherst Request, 6-1-15. Florida Commission Orders S. E. Tel. Co. to Make Service Improvements, 11-15-14. Hard, William L., Joins Michigan Commission, 2-15-86. "Hush-A-Phone" Decision, 1-1-8. Illinois May Order Companies to Serve Unregulated Territory, 12-1-26. Iowa Court Upholds "Fair Value," 10-15-10. Judge Reverses Commission On North Carolina Ruling, 3-1-55. Kansas Commission OK's Loan For Palco Phones, 8-15-71. Krueger, E. H., Named Ohio Commission Chairman, 3-1-58. Missouri Commission OK's Service Extension Plans, 3-15-70. Power Sought To Cut Loss In Phone Thefts, 8-15-67. Trends In Judiciary & Regulatory Decisions, by LaMar Stoops, 12-1-41.

DEPRECIATION:

NARUC Studies Accelerated Depreciation, 11-15-30.

DIRECT DISTANCE DIALING:

The Independent Company and Direct Distance Dialing, (A TE&M Training Course) by L. A. Hodson, 2-1-33; 5-1-33; 12-15-61.

DDD Book Issued By AT&T, 1-1-10.

DIRECTORIES:

Bay State High Court OK's Phone Book Covers, 6-1-55.

Trends In Judiciary & Regulatory Decisions, by LaMar Stoops, 12-1-41.

EARNINGS:

AT&T Net Tops $173,000,000, 12-1-26. AT&T's Year-End Report, 1-15-14. Clouds Over Telephone Fair Return, by John F. Childs, 10-15-61. Earnings Growth Reported For Citizens Utilities, 2-15-89. Good Year Reported By General Tel., 3-15-76. Illinois Bell Tells of "Struggle to Keep Pace," 4-1-58. Outstanding Year Reported By Lincoln Tel. & Tel., 3-15-77. Peninsular Tel. Reports New "Highs" For '56, 4-1-62.

EDITORIALS:

"Adequacy of Service," 8-1-24. "An Important Responsibility," 7-1-23. "Doing What Others Are Doing," 4-15-37. "Decision From Iowa," 11-15-33. "Emphasis On The Future," 10-15-48. "Good Precedent From Indiana," 4-1-30. "Happy Birthday, USITA," 10-1-41. "Independent Telephone Week," 5-15-41; 9-1-30. "Money-Money-Money," 7-15-35. "NARUC Recognizes The Facts," 12-1-29. "Not By Technology Alone," 8-15-36. "Our Corporate Enterprise System," 6-15-29. "750-Station Exemption Threatened," 3-15-43. "Six Percent On What?" 6-1-27. "Sixty Candles On The Cake," 3-1-31. "The Important 450-460 Mc Band," 1-15-31. "The 890-940 Megacycle Band," 1-1-25. "The Schools Can't Do It All," 11-1-27. "This Gap Needs Bridging," 2-15-39. "Three Dimensional Engineers," 2-1-31. "USITA Engineering Conference," 5-1-31. "Where's The Money Coming From?" 9-15-41.

EMPLOYES:

How To Keep Everbody Happy, by Ernest W. Fair, 11-15-48.

Old Problems In New Clothes, by T. DeWitt Talmage, 12-1-35; 12-15-45.

ENGINEERING:

Course In Telephone Engineering, 7-1-12.

Engineering Education Subcommittee Reports (USITA Engineering Conference), 5-1-16.

"Prospectus" — The Engineering Committee, by F. E. Norris, 10-15-57.

The Future of Engineering Education, by J. D. Ryder, 10-15-85.

The Training of An Engineer, by F. C. Mirgain, 11-15-39.

USITA Engineers Emphasize Education, by Richard A. Reynolds, 10-15-77.

"Values of Continuing Education," by H. R. McDonald, 10-15-83.

EXTENDED AREA SERVICE:

"Extended Area Service" — Features — Factors to Consider — Revenue Efforts, by John N. Elliott, 8-1-31.

NARUC Looks at Extended Area Service Problems, 11-15-22.

FINANCIAL:

American Tel. & Tel. Plans $250,000,000 Bond Issue, 8-15-71; Issue Sold, 11-15-14. Commonwealth Tel. Issues Stock to Institutional Investors, 6-15-54. Cost of Debt Capital, 11-15-22. Dundee Tel. & Tel. Closes 25-year, 1st Mortgage Loan, 3-1-63. Illinois Bell Approves Issue For 40 Millions, 1-15-62. Lincoln Tel. & Tel. To Sell 68,750 Shares of Common Stock, 5-1-16. Michigan Bell To Trim Capital Outlays, 9-15-10. North Pittsburgh Tel. Places Preferred Stock Issue, 6-15-59. Ohio Commission Approves Kingsville Stock Issue, 7-15-67. $1,000,000,000 Needed By New York Tel., 1-15-8. Security Issue OK'd For Lorain Tel. Co., 3-15-70. Sylvan Lake Tel. Closes $175,000 1st Mortgage Loan, 3-1-62. The Money Markets, 12-1-26. Va. Tel. & Tel. Gets OK for Stock Issue, 1-1-48.

FREE LITERATURE:

2-15-27; 3-1-21; 3-15-36; 4-1-10; 4-15-32; 5-15-33; 6-15-10; 7-1-59; 9-15-30; 10-15-129; 11-15-78; 12-15-59.

GOVERNMENT:

Executive Reserve Emphasizes "Less Butter — More Guns," 12-1-24. Falk Named Director B D S A Communications Div., 12-1-24. New General Services Administration Program, 12-1-24.

INDUSTRY NEWS BRIEFS:

Bell Laboratories Names Doherty, Asst. to Pres., 5-15-72. Berg, T. L., Joins General Tel. of Iowa, 1-15-67. Boyd, Frank, Jr., Joins General of Michigan, 4-1-50. Burns Named Auditor Jamestown, (N.Y.) Tel. Corp., 1-15-69.

California General Announces $72,000,000 Expansion, 2-15-82. Campbell, J. E., Elected Director, Michigan General, 8-15-67. Carlisle, Pa., Participates In Carlisle, England Conversion, 3-15-72. California Company Converts Washington Exchange To Dial, 9-1-70. Carolina Tel. & Tel. Installs 150,000th Telephone, 10-1-145. Carolina Tel. & Tel. Names Fowler to Executive Post, 6-1-63. Carolina Tel. & Tel. Selects Top Officials, 6-15-17. Central Tel. Co., Names Young, Division Mgr., 7-15-68. Citizens Utilities Announces Personnel Changes, 6-15-69. Clark, Verne B., Dies, 4-1-67. Coachella Valley Tel. Co., Builds New Telephone Center, 5-15-72. Concord, (N.C.) Tel. Co., Installs Its 30,000th Telephone, 1-1-10. Cooper, Floyd M., Joins Citizens Utilities Corp., 3-1-52. Corman, Daniel B., Joins Kentucky Cooperative, 2-15-84. Curtis, Walter M., Joins General of the Southeast, 3-15-67.

Davenport, E. R., Completes 50 Years of Industry Service, 7-1-50. Deuel Tel. Co-op Awards $209,549.73 Contract, 2-15-86. Dial System Planned For Cornersville, La., 3-1-55. Diefendorf, M. C., Joins General of Kentucky, 3-1-63. Dimmitt, Douglas, Joins General of Northwest, 2-1-63.

Electronics Exposition Held In Mexico, 3-1-67. Electronics Symposium Scheduled for May 1-3, 1-1-49. Elyria (Ohio) Tel. Co., Installs 20 Thousandth Telephone, 3-1-55. Fargo, Hiram D., Sr., Dies, 3-1-59. Four Veteran Independents Retire From Wisconsin Assoc. Board, 7-1-54.

General of Calif., Names Hart, Secy. and Attorney, 2-1-53. General of Calif. Starts Recruiting Men For New "Management Trainee" Program, 5-15-66. General of Kentucky Advances C. L. Morrison, 3-1-68. General of Ohio Reports Record Growth in 1956, 2-15-88. General of Pennsylvania Names Merchandising, Mgr., 7-15-80. General of N. W. Elects Myrick, Vice President, 4-1-49. General of S. E. Advances Johnson, 1-1-59. General of S. E. Advances Paul Payne, 2-15-86. General of S. E. Names Duncan To Traffic Post, 3-1-67. General of S. E. Names Griffith to New Post, 3-1-62. General of S. E. Reports On Stockholders' Meeting, 7-15-66. General of S. W. Installs 250,000th Telephone, 10-1-142. General of S. W. Reports Merger Completion, 5-15-72. General Names Taylor Director of Personnel, 2-1-69. General Telephone Announces Organizational Changes, 8-1-61; 6-15-72; 11-1-61. General Tel. Announces Personnel Dept. Changes, 5-1-62. Gen. Tel. Subsidiaries Start Revised Insurance Plan, 7-15-64. General Tel. System Names Two Board Members, 9-15-97. Gilroy Tel. Co., of Calif. Takes New Expansion Strides, 6-15-69. Grand River Mutual Tel. Participates In Trenton, Mo., Centennial Program, 9-1-66. Grand River Schedules Chula, Mo., Cutover, 3-15-81. Gulf States Drivers Receive, T.S.A. Safety Award, 5-15-79.

Harold Telephone Co. Completes Dial Cutover, 9-1-62. Higgins, Michael A., Dies, 6-1-63. Hintze, Neal A., Dies, 4-1-50. Horne, Ray, Named, Div'n. Plant Supt., 4-15-108.

Illinois Consolidated Approves $7,500,000 Construction, 6-15-59. Illinois Consolidated Installs 10,000th Telephone at Mattoon, 12-1-48. Indiana Tel. Completes Dial Cutover at Seymour, 3-15-72. Iowa Co-op Completes $180,000 Dial Cutover, 1-15-67. Keith, Miss Ruth I., Named "Elyria's First Lady" of the Year, 2-15-82. Korean Technician To Study at Warsaw, Ind., 2-1-63.

Lattin, Roy, Elected To General Tel. V. P., 10-1-144. Lincoln T. & T. Announces New Appointments, 10-1-126. Michigan Company Plans REA Loan Request, 1-15-69. Michigan General Advances R. E. Kinsman, 5-1-59. Michigan General Elects Boveri, Sec.-Treas., 5-1-63. Middle States Names Wandrey, State Manager, Ill. 2-15-84. Millionth Tel. Installed In Washington State, 7-1-51. Mountain, Miss Marion, Joins General of S. E., 7-15-67.

New York Central Appoints Two Communications Engrs., 6-1-58. New York Central Names Ritter, Communications Supt. 7-15-66. Northern Ohio Tel. Co. Advances W. O. Pinyerd, 2-1-75. Northern Ohio Tel. Advances John Woodward, C. A. Henry, 12-1-46. Northern Ohio Tel. Co., Install 100,000th Phone, 6-15-73. Northern Ohio Tel. Completes Medina DDD Installation, 8-15-72. Northern Ohio Tel. Co., Inaugurates Dial Service at New London, 3-1-52.

Ohio Bell Drops 4-Party Service in Tiffin Area, 10-1-119. Ohio Consolidated Plans Circleville Expansion, 7-15-64. Ohio General Names Stecher to New Post, 3-15-22. Oregon-Wash. Tel. Co., Joins United Utilities, 4-1-58. O'Shaughnessy, J. K., Retires From REA, 11-1-66. Ownbey, Ernest, Dies, 1-1-46.

Plant Officials Named at Waynesboro, Va., 5-15-77. Pool Named Director, General of S. W., 3-15-76. Post Joins Southwestern States Tel. Co., 5-1-58. Power, Donald C., Receives Public Service Award, 6-1-55. Power Line Phones Re-

305 RAMAC*

makes toll rating automatic for direct distance dialing

With its 5-million-character disk "memory" that files and finds facts at random, the 305 RAMAC® makes automatic rating of tolls *in random sequence* a reality!

It also handles rate settlement, toll study data, and other vital traffic statistics *automatically* . . . at the same time the toll rating is being done.

Get the full IBM 305 RAMAC story now. Just phone your local IBM representative. Or write: COMMUNICATIONS DEPARTMENT A57-b, International Business Machines Corporation, 590 Madison Avenue, New York 22, New York.

*Random Access Method of Accounting and Control

DATA PROCESSING
ELECTRIC TYPEWRITERS
TIME EQUIPMENT
MILITARY PRODUCTS

60 1897-1957 *Years of Independent Telephony*

IBM DATA PROCESSING

Easy to Install will not Creep

KEARNEY

EXPANSION ANCHORS

Notice the curve of the blades . . . specially engineered to expand easily into the undisturbed earth. When in place, the blades exert an *outward* as well as upward pull for extra holding power.

KEARNEY Expansion Anchors are available in 2, 3 and 4-blade types. You can be assured they will develop Published Holding Power.

For Better Construction . . . Safer Maintenance

Specify

270

KEARNEY PRODUCTS

JAMES R. KEARNEY CORPORATION

4224-42 Clayton Avenue, St. Louis 10, Mo.

Canadian Plant: Guelph, Ontario

Index

(Continued from page 70)

ported By Russia, 2-15-86. Pratt, George, Dies, 3-15-82. Prehn Takes Post With Brazil Firm, 3-15-80. Price, Roy G., Joins Sully-Buttes Co-op., 2-15-84.

REA Names R. L. Allen Head of Section Seven, 3-15-96. REA Names Streukens Telephone Section Head, 6-1-57. REA Reports On New Telephone Loans, 1-15-69. Royce, E. H., Heads Nebraska Pioneer Group, 7-1-48. Ryder, Allan W. Joins Commonwealth Telephone, 6-15-70.

Sherman Appointed Supervisor of Lincoln T. & T., 10-1-126. Sherman, Texas, Gets DDD Equipment, 12-1-48. Sidlo, John, Retires From Ohio Consolidated, 1-15-66. Signal Officer Visits West Coast, Maj. Gen. J. D. O'Donnell and Col. S. S. Cerwin, 1-1-48. Smithsonian Exhibit Tells Story of Telephone, 4-1-57. S. W. Bell Ends 4-party Service to Eight Towns, 8-1-67. Southwestern States Advance Bill F. Bann, 10-1-142. Southwestern States Applies For Rate Adjustment, 10-1-119. Southwestern States Tel. Opens New General Office, 12-1-43. "Sun Dial" Celebrates 25th Anniversary, 3-1-67. Swallows, Arnold, Named To Durham, N. C. Post, 2-15-84.

Teletype Link Will Mean More Trading With Europe, 1-1-48. Tidewater Tel. Announces Two Personnel Changes, 7-15-64.

United Tel. Consolidates Management Staffs, 1-15-67. Virginia Governor Receives State's 1,000,000th Telephone, 1-1-49. Warren Tel. Co. Starts Newton Falls Expansion, 7-15-66. Washington, N. C., Gets DDD Equipment, 12-1-47. West Coast Tel. Promotes Scripture, Peterson, Gunter, Ward, and Hanenburg, 3-1-52. Weyers Cave Tel. Exchange Converted to Dial Service, 7-15-79. Williams, R. F. Named Secretary, General of Northwest, 3-15-99. Worley, Roy, Joins General of Ohio, 3-15-77.

INDUSTRY NEWSLETTER:

Becker Amendment Defeated, 6-1-15. Bureau of Public Road, Issues Memo on Highway Location Expense, 6-1-14. Cost Spread Called "Inequitable," 5-15-16. Denver To Test New Service, 3-15-14. Electronic Conference, 8-1-10. Expansions & Improvements, 1-1-10; 2-15-16; 3-1-25; 7-15-16; 8-1-10; 9-1-12. Farms With Telephones, 9-1-12. Financial, 9-1-12. Foreign Attachment Tariff, 6-1-14.

Goodman (Mo.) Tel. Co. Plans Dial Cutover, 1-1-10. Grand River Mutual Tel. Corp., announces New Dial System at Bethany, Mo., 1-1-10. Growth Report, 7-1-12. Harlan (Kans.) Tel. Co. Votes To Merge With Gaylord, (Kans.) Tel. System, 1-15-14. Holt Tel. Co. Completes Construction of New Building At Wister, Texas, 1-15-14. Hughes Tel. Co. Inc., Bailey, (Miss.) Granted Charter of Incorporation, 1-15-14.

Independents Plan New Mobile System, 7-15-16. Leach appointed Div'n. mgr. General Tel. Co., of Ill., Northern Division, 1-1-10.

Manufacturers' Representatives Named to BSDA Task Force, 5-15-14. Meadow River Tel Co., Rupert, W. Va., Awards $51,762 contract For Dial Equipment, 1-1-10. New "Current Value" State, 7-1-12. New Owners, 1-1-10; 3-1-25; 7-15-16; 8-1-11; 9-15-10; 10-1-26. No Slow-Down In Sight, 8-1-10. Northeast Texas Tel. Co. Holds Open House, 1-15-14. Noxapater (Miss.) Tel. Co., Inc., Granted Charter of Incorporation, 1-15-14. 101 Million Telephones In World, 1-15-8. Organizational Changes Announced by General Tel., 5-1-18.

People In The News, 1-1-10; 7-15-18; 10-15-14. Rate Adjustments, 7-15-16; 8-1-10; 9-1-12; 9-15-10; 10-15-14. REA Announces New Telephone Loan Security Requirements, 5-15-14. REA Borrowers Complete Construction of 100,000 Miles of Phone Line, 7-1-12. REA Changes Methods Of Handling Interest and Principal Payments, 7-1-12. REA Demonstrates New Equipment, 10-15-10. REA Interest Rates May Go Up, 2-15-14. REA Loans, 3-1-24; 7-15-18; 8-1-11; 9-1-12; 9-15-12; 10-1-26; 10-15-14. REA Loan Report, 8-1-10. REA Reports Busy '56, 1-15-8. REA Statistical Summary, 7-15-18.

61,970,000 Phones In Service, 10-1-23. Telephones In Kaplan, La. Go Dial, 1-1-10. Trammell, B. C., Named District Manager to Succeed Grady Shirley, 1-15-14. Turtle Lake (Wis.) Tel. Co. Will Convert To Dial, 1-1-10.

USITA Convention, 10-1-23. USITA Plans Seminar For Engineers, 2-15-14. USITA Plans Smithsonian Exhibit, 2-1-8. USITA 60th Anniversary Convention, 9-15-10. USITA To Employ Radio Engineer, 7-15-18.

Wank, Named Div. Plant Supt. Central Div. Union Tel. Co., 1-1-10. Western Electric Ranked 9th Largest, 10-15-10. Western Electric Sales To Hit Record, 1-15-14. Western Electric Co. Starts Graduate Program, 7-15-16. Yadkin Valley Tel. Membership Corp., Yadkinville, N. C. Elects James M. Parks of Union Grove Pres., 1-15-14.

LABOR:

Beirne Re-Elected CWA President, 7-15-16.

IBEW Plans Push For Federal Agency to Handle Telephone Labor Disputes, 4-15-12.

Southern Bell Collects From CWA, 3-1-24.

LINE CLEARANCE:

Chemical Brush Control, by O. A. Hanna, 5-15-50.

MANAGEMENT:

Profits and Service Through Better Management, (A TE&M Training Course), by James L. Morrison, 1-1-29; 1-15-45; 2-15-48; 3-15-50; 4-1-33; 6-1-31; 7-1-25; 9-1-36.

The Major Problems of Small Community Operations, by J. W. Heckman, 3-1-33.

MANUFACTURERS:

American Steel & Wire Advances George Pyle, 8-15-82. Anaconda Announces Three Appointments, 5-15-97. Ansonia Announces Line Of Color Coded Cables, 6-15-76. Ansonia Holds Annual Sales Meeting In New Plant, 2-15-92. Ansonia Telephone Cable On Duty At South Pole, 9-15-104. Autelco Mediterranea, Milan, Announces Executive Changes, 3-15-86. Automatic Electric Co. Announces Transfer of Carrier and Microwave Radio Engineers, 10-1-130. Automatic Electric Expands Canadian Plant, 3-15-90. Automatic Electric Int'l

Forms Mexican Organization, 2-15-94. Automatic Electric Names Jones, Installation Chief, 1-1-54. Automatic Electric Plans Record Move, 6-15-13. Automatic Electric Co. Plant Dedicated At Northlake, 12-1-69. Automatic Electric Units Given New Names, 1-1-60.

Barrett Forms New Sales Department, 7-15-73. Benoist, E. G. Dies, 8-1-62. Berry Managers & Supervisors Meet, 2-1-66. Biagi, A. D., Appointed FTL Executive Engineer, 12-1-70. Biggan & Associates Extends Battery Sales Business, 5-15-96. Blomeyer, Earl, Named V. P. Gladwin Plastics, Inc., 2-15-80. Boyd and Rousch Join Kellogg Swbd., 1-15-79. Brennan Appointed To New Post at Stromberg-Carlson, 10-1-130. British Cable Manufacturer Names Barker Sales As U. S. Agency, 10-15-134. Brook, Eric, Dies, 4-15-100. Brown, D. Walter, Dies, 4-15-100. Bryan, Charles E., Joins Reynolds Metals Co., 5-15-94. Buckeye Announces New Sales Expansion Program, 3-15-84. Buckeye Tel. Holds Plastic Cable Clinic, 8-1-60. Buckingham Mfg. Elects Riggs, V. P., Sales, 2-15-92. Burfeind Joins Two Firms As Telephone Consultant, 6-1-62. Byrd, Marvin A., Joins U. S. Instrument Corp., 6-15-76.

C & D Adds Philadelphia Sales Rep., 1-15-71. C & D Batteries Adds New Project Engineer, 4-1-67. C & D Batteries Announces Organizational Changes, 7-15-76. C & D Names Ihrig, New Chicago Salesman, 12-1-70. C & D Names New Atlanta Sales Engineer, 2-15-92. C & D To Install New Control System, 12-1-73. Chance Co., Marks 50th Year, 7-1-58.

Chenault, Marvin, Joins Superior Cable Corp., 6-15-86.

Collins Radio Announces New Expansion Plans, 10-1-136.

Collins Radio Creates New Systems Division, 8-15-83.

Columbus McKinnon Announces Appointments, 4-15-103.

Cook Electric Names Hanway, Fla. Dist. Mgr., 1-1-53.

Copperweld Announces New Guy Strand, 3-15-96.

Daly Joins A. B. Chance Co., 12-1-72. Doughty, Leon A., Dies, 6-15-78. Duff-Norton Advances Krueger to New Post, 2-15-92. Du Mont Announces "D D" Mobile Radiotelephone System, 5-15-90 Du-Mont Names Fockler To Engineering Post, 11-1-66.

Electrical Communications Advances S. I. Pichey, 4-15-104. Electronic Secretary Industries Builds New Wisconsin Plant, 7-1-67, Ellison, Paul, Joins Cook Electric Co., 1-15-76. Employes Commemorate Klein's 100th Anniversary, 7-15-73. Engsberg Leaves Retirement: Joins Ansonia Wire & Cable, 1-15-79. Executone To Be Distributed By Automatic Electric Sales, 8-15-74. Exide Announces Top Management Changes, 8-15-84.

Foster, Clyde T., Joins Superior Cable Corp., 4-15-100. General Cable Manufactures Fully Color Coded Alpeth, 8-15-78. General Code Retained As Lenkurt Consultant, 7-1-68. General Tel. Corp. Buys Electronic Secretary Industries, 3-15-97. General Tel. Directory Elects Two Officers, John D. O'Neil and Miss Hazel Lange, 1-1-54. General Tel. Directory, Holds Training Conference, 10-1-132. General Tel. Laboratories Organized In Chicago, 1-15-77. Gladwin Plastics Announces The New "Boothette," 8-15-74. Goldsworthy Joins L. M. Berry & Co., 5-15-24. Gould Appoints Kelly General Sales Manager, 9-1-76. Gould Appoints C. I. Simms, Manager of Utility Sales, 2-15-94. Grawols, Glen L., Retires From Automatic Electric, 8-15-91.

Hopkins, John Jay, Dies, 6-15-82. Hubbard & Co. Announces New Sales Appointments, 4-15-103. Hubbard & Co. Announces Sales Staff Changes, 9-15-102. Hubbard Names LeVee Director of Engineering, 6-15-92. Hubbard Names Warne Vice President, Sales, 5-15-96. Hubbard Research Center Planned For Chicago Area, 10-1-146.

Indiana Steel & Wire Announces New Line Wire, 7-1-67. International Harvester Announces "Anniversary Line," 5-15-84. International Harvester Names Three to New Positions, 5-15-88. IT&T Appoints Dominguez Executive Engineer, 11-1-70.

Jaap, John, Dies, 4-15-100. Jackson Elected Ass't. V. P. IT&T, 10-1-124. Jenks Elected Pres., International Harvester, 12-1-75.

Kaplan, Frank R. S., Dies; Death Ends Active Career, 11-1-65. Kellogg Appoints Pirnie Regional Manager, 10-1-132. Kellogg, James H., Named Pres., Charles T. Brandt, Inc., 6-15-73. Kellogg Swbd. Advances George F. Doubek, 10-1-132. Kellogg Swbd. Names Cheney To Regional Manager Post, 8-15-78. Kellogg Names Watson To Ohio Sales Post, 8-1-68. Kellogg To Distribute DDD Equipment, 10-1-130. Kellogg Veterans Hold 13th Annual Banquet, 6-15-84. Krueger, T. W., Named Duff Norton Sales Manager, 7-15-76.

Lenkurt Adds Engineer To Carrier-Microwave Staff, 6-1-68. Lenkurt Electric Forms International Subsidiary, 1-15-76. Lenkurt Electric Opens Washington, D. C. Office, 5-15-88. Lenkurt Electric Visited By Dr. Joseph Schniedermann and Eberhard von Hauenschild of Siemens & Halske, 1-15-72. Linen Thread Co. Develops New Nyak Lacing Cord, 9-15-92. Lorain Products Names Middle West Representative, 10-1-136. Lynch Carrier Announces Personnel Appointments, 10-15-126. Lyons, Thomas J. Joins Superior Cable Corp., 8-1-62.

McCaig, Harold T., Dies, 9-15-102. Mills, D. L., Elected Exec. V. P. of Federal, 10-15-134. Morrell, Sydney W., Joins Int'l. Tel. & Tel., 7-15-78. Morrison Steel Products Names George B. Earl Sales Mgr., Service Body Division, 1-1-54. Mutual Liquid Gas Names Levy Eastern Mgr., 12-1-71.

Napp and Stewart Join Exide Industrial Div'n., 10-1-146. Natco Corp. Announces Plans For $2,100,000 Alabama Plant, 5-15-95. National Standard Introduces New Communication Wire, 1-15-72. New Colored Telephones Offered by Automatic Electric, 7-15-85. North Electric Names Snyder Purchasing Agent, 2-15-57.

Pace, Frank Jr., Elected Pres., General Dynamics Corp., 6-15-86. Paddock Named Exec. V. P. Burgess-Manning Co., 7-1-63. Patton, Frank A., Joins United States Instrument, 10-1-134. Pennsylavnia Bell Starts "Pagemaster" Service, 8-15-82. Perkins, Wm. H., Telephone Veteran Dies, 2-15-95. Phelps Dodge Names Wilson District Manager, 6-15-73. Philco Acquires Sierra Electronics Co., 1-1-54. Powlison Retires from Armstrong Cork, 12-1-72. Preformed Line Announces Personnel Appointments, 5-15-91. Preformed Line Announces Recent Personnel Changes, 6-15-83.

Raytheon Promotes Alpert and Sedick, 11-1-67. Reliable Electric Announces New Drop Wire Clamps, 8-15-74. Rex Corp., Appoints Member To Sales Staff, 9-15-92. Rittenhouse, John F., Named Pres., C & D Batteries, 7-1-62. Ritter, Victor G., Joins Reliable Electric Co., 9-1-76. Robbins, Chester, Joins Lenkurt Electric Co., 5-15-100. Royalty Joins, Lenkurt Electric Co., 8-15-84. Russell, Frank, Joins Lenkurt Electric Co., 1-15-75.

Schauer Manufacturing Corp., Celebrates 50th. Anniversary, 5-15-87. Sneden Joins National Electric Products, 5-1-68. Sprackling Succeeds Keresey As Anaconda President, 7-15-72. Stromberg-Carlson Names Assistant Publications Editor, 8-15-92. Stromberg-Carlson Names Holt to West Coast Post, 8-15-82. Stromberg-Carlson Assigns Four Sales Engineers, Morris L. Hansen, Kenneth J. Terry, Edward T. Ferguson, and Kenneth J. Kelley, 1-1-54. Stromberg-Carlson Names Davidson to New Post, 7-1-67. Stromberg-Carlson Names Huddleston to Sales Post, 6-15-87. Stromberg-Carlson Names Morris To Research Post, 9-1-75. Stromberg-Carlson Opens New Electronics Center, 7-15-70. Stromberg-Carlson Reports Changes In Telephone Finance Dept., 5-15-86.

Taylor Harrison, Joins C & D Batteries, Inc., 7-1-55. Teifield, A. R. Elected V. P. National, Advertising Association, 7-15-76. Tupica Named Manager Cook Wirecom Division, 2-15-100.

Vadersen, Charles, Joins Federal Laboratories, 7-1-59. Van Wie, Earl, Receives Kellogg Switchboard Award, 9-15-104.

Warren Mfg. Announces Personnel Assignments, 11-1-67. Warren Mfg. Introduces New Power Equipment Line, 12-1-74. White Motor Co. Purchases Assets of Reo Motors, Inc., 7-1-68. Whitney Blake Announces New Sales Representatives, 4-15-105. Wilgus Named Sales V. P. Electric Products Co., 8-15-74.

MERCHANDISING:

Interurbia-Changing Face of America, 10-15-68.

Merchandising Training Program, by J. P. Borden, 11-1-39.

Sales Training, by John S. Davies, 11-1-42.

USITA Merchandising Training Panel, (USITA Convention), 11-1-39.

MICROWAVE:

B. C. Tel. And Pacific Bell Announce Microwave Project, 5-15-76.

Carolina Tel. & Tel. Co., Completes $2,000,000 Microwave System, 8-15-70.

Engineering & Economic Aspects of Microwave Service, by E. H. Danner, 11-1-31.

General of S. W. Tests Microwave Installation, 2-1-75.

Lincoln Tel. & Tel. Starts New Microwave Construction, 12-1-47.

Please turn to page 74

Index

(Continued from page 73)

NEW PRODUCTS:

Analyzer, Wave, 6-1-64. Anchors, Hollow Wall, 4-1-65.

Battery, Telephone, 4-1-64. Battery Cell Filler, 5-1-64. Bells, Loud Ringing, 2-15-96. Bender, Power, 5-15-80. Block, Wheel, 9-15-69. Booth, 5-1-65.

Cabinets, "Erector Set," 2-15-97. Cable Coaxial, 6-1-65. Cable Reel Brake, 8-1-64. Cable Reel Handler, 3-15-95. Charger, Battery, 8-15-87. Conduit Nipples, 3-1-64. Contact Burnisher, 5-1-64. Contact Cleaner, 2-15-96. Converter, Phase Voltage, 11-15-88. Cord, Over-the-Floor Extension, 8-1-64.

D C Power Supply, 11-15-88. Degreaser Spray, 4-15-74. Derrick, 9-1-72. Dial Bank Cleaning Brush, 6-15-89. Differential Hoist, 3-15-95. Digger, 3-1-64. Digger Attachments, 6-15-88. Digger, Automatic Hole, 9-15-67. Ditcher, Wheel-Type, 5-15-82. Drafting Table, 6-15-88.

Earth Boring Machine, 8-15-86. Fasteners, 3-15-94. Gaff Shaping Kit, 9-1-73. Grating & Treads, 7-1-65. Guy Protector, 6-15-89.

Heater, Ventilating, 5-1-64. Herbicide, 8-1-65. Impedance Bridge Assembly, 7-15-81. Installer Bodies, 5-15-80. Insulation Tester, 9-15-69.

Jack Panel, 8-1-63. Ladder, Aerial, 4-15-70. Ladder, Aerial, 9-1-71. Lever Puller, 8-1-63. Light, Emergency, 7-1-64. Lightning Unit, Emergency, 2-1-73. "Line A Pole," 4-15-70. Lock Nut, Self-Threading, 7-15-81. "Low Ohm Meter," 5-15-81.

Manhole Guard Rails, 4-15-75. Mast Kit, 11-15-91. Mast, Service Entrance, 5-15-82. Miniature Meter, 4-15-79. Mobile Receiver, 7-1-64. Mobile Work Shop, 9-15-68. Numbering & Lettering Kit, 3-1-65.

Plier, 9-15-68. Plier, Shear Cutting, 11-15-91. Pole Bandage, 8-15-87. Pole Bearing Plate, 9-15-67. Pole Preservative, 6-1-64. Power Plant, 9-15-67. Power Tool, 2-1-73. Pruning Tool, 2-1-72. Pumps, Electric, 4-15-79. Pump, Hydraulic Power, 9-15-70.

Rack, Type "S," 3-15-94. Ranger Finder, 5-15-81. Reel Cart, 5-15-80. Reel Trailers, 7-1-64. "Reelift," 5-15-82. Rigging, Cable Pulling, 6-15-89. Rope, Signal Carrier Wire, 11-15-88.

Safety Straps, 8-15-88. Saws, Chain, 8-15-86. "Secoder," 2-1-72. See-Thru Draftstamps, 8-15-88. Shelving, 1-1-56. Skinning Knife, 4-15-70. Slide Rule, 3-1-65. Soldering Iron, 4-15-75. Soldering Tool, 9-1-71. Solderless Wiring Devices, 2-1-73. Spotlight Tester, 4-15-78. "Spur-Stay Pad," 9-1-71. Storage Unit, 4-1-64. Supporter Strap, 8-15-86. Suspenders, Belt, 7-15-81.

Tail Light, Self-Powered, 5-15-83. Tape, Polyester Web, 7-15-82. Tape, Splicing, 11-15-91. Tape, "Write-On-It," 4-15-74. Tester, Pocket-Size, 1-15-80. Trencher, 9-1-71. Trouble Card Rack, 8-15-88. Truck Body, 6-1-64. Truck Bodies, 1-15-80. Truck Crane, 7-15-82. Truck Equipment, 1-1-56. Truck, Heavy Duty, 1-15-81. Truck, Line-Construction, 7-15-81. Twin Castors For 702 Ditcher, 8-1-63.

Utility Pockets, 3-15-94. Voltmeter, 4-1-65. Waist Belt Supporter, 2-15-96. Wire, Conductor, 11-15-91. Wire, Parallel Line, 4-15-70.

PERSONNEL:

Securing Top Results From Work-Assignments, by Ernest W. Fair, 1-1-34.

PLANT:

A Case History Report On Pressure Treatment of Timber Poles, 7-1-29.

A Real Economy Program, Regular Outside Plant Maintenance, by Richard Allen, 4-15-48.

"Balanced Training Program" — A Cure For Plant Personnel Problems, by T. DeWitt Talmage, 7-15-44.

British Post Office Uses Mobile Exchange To Provide Temporary Facilities, by R. G. Tungate, 6-15-50.

Chemical Brush Control, by O. A. Hanna, 5-15-50.

Earth Boring Equipment Saves Time and Money, by Richard Allen, 9-15-43.

Equipment Maintenance, by R. K. Ghormley, 10-15-75.

Explosives For Plant Construction, by R. G. Tungate, 1-15-51.

Fuseless Protection, by John S. Reed, 1-1-40; 2-1-50.

Handbook Data Sheets, by John S. Reed, 1-1-47; 2-1-48; 2-1-49; 2-15-73; 5-15-68; 6-15-62.

How To Plan Your New Exchange Bldg., 11-1-63.

Induced Noise, Causes and Cures, by P. K. Fugate, 10-15-71.

Maintenance Problems In The Independent Industry by B. L. Arnold, 2-15-43.

Modern Cable Construction, by John S. Reed, 2-15-55; 4-1-39; 4-15-58; 7-1-36; 9-15-71.

Modern Construction Tools Save Workers' Time — Reduce Labor Costs, by Myrle Shafer, 4-15-41.

New Unit Lifts Workers To The Job, by George A. Bridges, 6-15-56.

Old Problems In New Clothes, by T. DeWitt Talmage, 12-1-35.

One Man Aerial Tent, by E. L. Alford, 11-15-54.

Planning Plant Practices, by T. DeWitt Talmage, 1-15-37; 3-1-37; 5-1-43; 5-15-52.

Plant Engineering Construction & Maintenance, by W. M. Driggs, 7-15-39.

Pre-Wired Homes, 1-15-41.

REA Borrower Begins Buried Plant Installation, 11-1-61.

Rural Distribution Cable, by R. G. Tungate, 11-15-70.

Rural Distribution Wire, by John S. Reed, 6-15-63; 9-1-42; 9-15-49.

Rural Distribution Wire, Maintenance of, by O. F. Kinsel, 10-15-76.

Telephone Plant Planning Pays Off, by T. DeWitt Talmage, 8-15-51.

"The Balanced Training Program" — A Cure For Plant Personnel Problems, by T. DeWitt Talmage, 6-15-33.

USITA Plant Committee Report, by H. P. Siebken, 10-15-70.

PROPERTY TRANSFERS:

Chenango & Unadilla Tel. Buys Cummings Tel. Corp., 3-15-65. Columbia Utilities Purchases Crater Lake Phone System, 8-15-68. Douglas Group Gains Control of Thermal Belt Tel. Co., 10-1-124. Draves, Oley, Purchases Brookville (Kans.) Tel. Co., 11-1-64. Dudley, (Ga.) Tel. Co. Sold to Rentz, Ga. Co-op., 12-1-43.

General Waterworks Unit Buys Telephone Properties, 4-1-62. Kansas Commission OK's Sale of Osage Tel. Co., 4-1-63. Kansas Company To Buy Two United Exchanges, 8-1-68. Lewis (Kans.) Tel. Co., Buys Garfield Tel. Co., 7-1-50. Marion Rural Tel. Co., Philadelphia, Mo. completes Purchase of Exchanges at Warren, Eden, Philadelphia and Berbow in Marion County, Mo., 1-1-10. McKrae Tel. Exchanges Transferred to United, 11-1-63. Middleburgh Tel. Takes Over Schoharie Tel. Exchange, 9-15-96. Minnesota Independent Sold To New Corporation, 6-1-57. New York Commission OK's Spencerport Consolidation, 7-15-66.

Rauss, Ervin, Purchases Oklahoma Exchange, 1-1-49. Rocksprings & Nueses Tel. Buys Utopia (Tex.) Tel. Co., 6-15-54. Shrum Purchases Huntsville, Ark. Co., 6-15-54. Southwestern Bell Purchases Mulvane (Kans.) Tel. Co., 7-1-48. S. W. Bell Takes Over Sycamore, Kans. Subscribers, 11-1-64. Valley Tel. Co. Buys Oregon Cooperative, 2-1-64.

PUBLIC RELATIONS:

"Don't Be A Hermit — Participate In Civic Affairs," by Ernest W. Fair, 5-1-48.

General of Southwest Directors Hold Board Meeting In Exchange Area by F. E. Hightower, 2-15-75.

How Are Your Telephone Manners? by Phil Glanzer, 5-1-39.

"Not A Formula — But A Way Of Life," 2-1-42.

Our Telephones Went To A Farm Progress Show, by Bill Brooks, 2-1-37.

Public Relations Is Personality, by A. J. Barran, 11-15-43.

Public Service Programs — General of California's Service Programs Aid Educational and Civic Groups, 1-1-35.

The Case of The "Harried Hippopotamus," by Allen R. Stacey, 8-1-33.

QUESTIONS & ANSWERS, by Jay G. Mitchell:

A Possible Error In Ordering Equipment 4-1-45. A Sample of Labor Relatives, 4-1-45. An Interesting Novelty, 4-1-45. An Unusually Difficult Trouble — Peak Voltage, 1-1-43. Basic Elements of A Rate Case, 2-1-64. Cable Hangers, 4-1-48. Capacitors, A Clarification, 6-1-48. Clean Cut Dialing Impulses, How to Insure, 1-1-43. Conventional Symbols for Capacitors, 2-15-70.

Literature about Transistors, 2-1-47. Peak To Peak Voltage, 2-1-46. Proving The Decibel Formula, 6-1-48.

Read The Advertising Pages, 6-1-48. Sub-Standard Transmission, 3-15-66. The Volume Unit Meter, 2-15-70.

RADIO TELEPHONE:

Push Button Dialing Developed For Rural Radio Telephone Users, 10-15-127.

Spectrum Usage, 1-1-16.

"The 890-940 Megacycle Band," 1-1-25.

"The Important 450-460 Mc Band," 1-15-31.

RATES:

Alabama Commission OK's Pell City Rate Boost, 5-15-77. Citizens Mutual Tel. Co. Granted Rate Increase, 10-1-124. Cost of 'Extras' Goes Up, 10-1-23. General of Calif. Requests Rate Boost, 12-1-77. Gen-

eral of Southwest Reports Rate Increases, 1-15-71; 4-1-59; 5-1-63; 6-1-58; 7-1-55. Geneva (Ohio) Telephone Co., Boosts Rates, 3-15-70. Gilroy Tel. Reduces Rates, 8-1-10.

Kansas State Tel. Co. Wins Rate Adjustment, 1-1-49. Mansfield (Ohio) Tel. Co., Makes Rate Adjustment, 2-15-88. Minnesota Commission OK's New Twin Valley Rates, 6-15-91. Mississippi Company Wins 16% Rate Increase, 3-15-71. Missouri Commission Denies Craw-Kan Co-op Request, 3-15-70.

NARUC Committee Studies Rates & Revenue Problems, 11-15-18. Newport Telephone Co. Granted New Rates, 2-1-63. New Rates Approved For Cassadega Tel. Corp., 8-15-71. New Rates Approved For Chenango & Unadilla Tel., 9-15-93. New Rates Approved For Halstad Tel. Co., 6-15-70. New York Commission Accepts Tariff Amendments (Oreskawy Falls Tel. Co.; Dunkirk & Fredonia Tel. Co.; Truxton & Cuyler Tel. Co.), 11-15-86. Northwestern Bell Tel. Co., Omaha, files Application With Minnesota Railroad & Warehouse Commission Requesting "Upward Adjustment" in Rates, 1-1-10.

Oklahoma Commission Denies Western Tel. Rate Boost, 2-1-69. Pending Rate Bids Totalled By AT&T, 11-15-17. Rate Boost Approved For Oneida County Tel., 5-1-62. Rate Boost OK'd For Vernon (N. Y.) Tel. Co., 6-1-55. Rate Increases Granted Southwestern States Tel., 10-1-140.

S. W. Bell Reduces Rates To Fringe-Area Customers, 3-1-63. S&T Telephone Co-operative Association, Brewster, Kans., Granted Interim Dial Rate Schedule, 3-1-68. Tidewater Tel. Co. Gets Rate Increase, 6-1-57. Vermont Commission Denies NET&T Rate Increase, 3-15-82. West Virginia Increase Granted, 1-15-8. Wisconsin Public Service Commission Approves Application of Elk Creek (Wis.) Tel. Co. For Authority To Increase Rates, 1-1-10.

REA:

Beal Designated Assistant REA Administrator, 4-1-68. "Buy American," 2-15-14. Equity Requirement For Co-ops, 1-1-14. REA Interest Rate May Go Up, 2-15-14. REA Loan Report, 2-1-70. REA Proposes New Equity Requirements for Tel. Loans, 4-1-59. REA Reports On 1956 Operations, 2-15-22. REA Names Allen Head of Section Seven, 3-15-96.

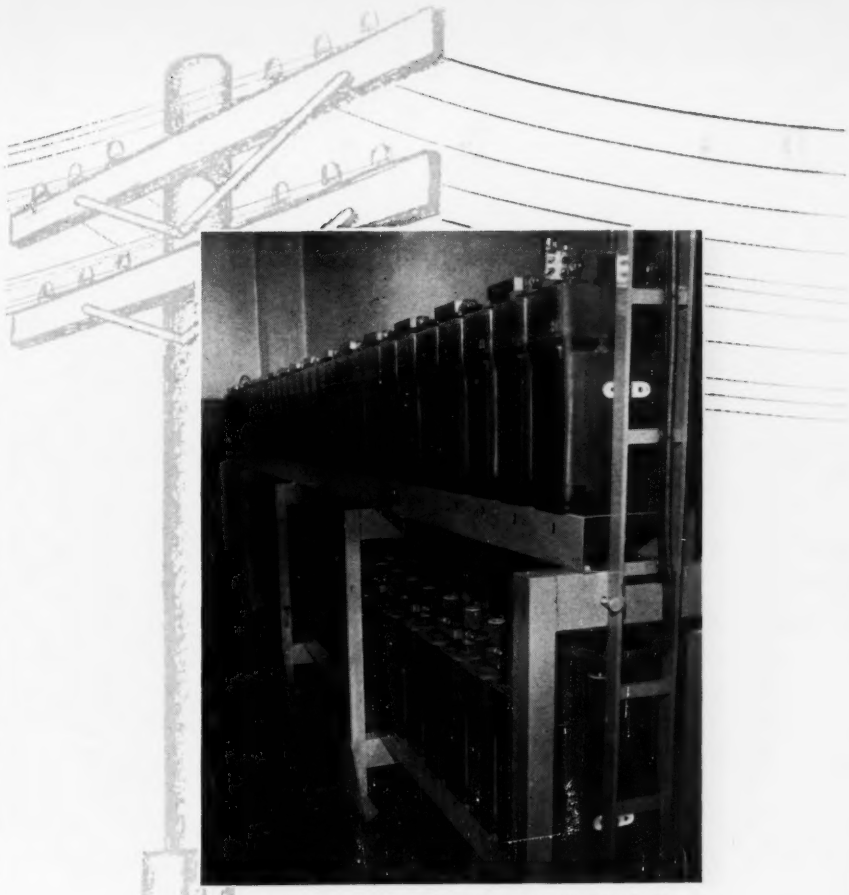
REVENUE BOOSTERS:

"A New Package," 8-1-18. "Car-Seat Dialing," 7-15-28. Competition?, 1-1-18. "Curbstone Telephone," 3-15-30. Merchandising Pays Off, 1-1-18. "One Stop Plan," 5-15-26. "Phone-Zones," 2-1-26. Plant Man Offers Sales Tips, 2-15-30. "TFT," 8-15-26. TFT (Too Few Telephones), 9-15-14. The Roanoke Motel Story, 8-15-26. The Story of Coin Telephones, 8-1-19.

SAFETY CORNER:

Defensive Driving, 1-15-26. Hand Soldering & Brazing, 8-15-31. Hazard Hunt, Traffic Girls Do A "Sherlock Holmes" For Safety's Sake, by Rita Walby, 6-1-44. Holding Employe Interest In Safety, by Dick Allen, 11-15-55. "It's Foggier Than You Think," 5-15-30. Prevention of Electric Shocks, 4-15-30. Prevention of Fires, 8-1-22; 8-15-30. Safe Motor Vehicle Opera-

Please turn to page 78



Two-tier installation of a 66 cell C & D Type PCE-300 PlastiCal® battery rated at 300 Ampere Hours (8 hour rate) provides standby power in the Toll Building of Carolina Telephone and Telegraph Company, Fayetteville, N. C.

At Carolina Telephone and Telegraph Company

Toll building batteries are engineered to give 25 years of dependable power!

C & D PlastiCal®, the revolutionary new type of storage battery cells, are built to give extra long life in telephone service.—Installed in February 1954, the battery illustrated is engineered to give 25 years of dependable power.

Advanced design lead-calcium grid construction—rugged, transparent plastic cases—manufacturing know-how developed over many years of intensive effort—rigid quality control—plus a host of exclusive, built-in easier maintenance and safety features—are all in C & D PlastiCal, "*the battery of tomorrow, today*".

For details, send for Bulletin T-530.

C&D BATTERIES, INC.

of Conshohocken, Pa. ... Attica, Ind.

SINCE 1906

SALES AND SERVICE OFFICES IN PRINCIPAL CITIES FROM COAST TO COAST

(*Continued from page 77*)

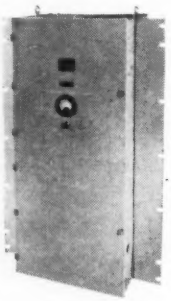
construction and maintenance digest

A breaking strength of 1800 pounds makes this Ansonia Wire & Cable Company product ideal for temporary service or cable relief.

Your Stromberg-Carlson representative can offer prompt delivery on your order.

Raytheon Recticharger® Battery Chargers—Complete Line 3-400 Amperes

Entirely redesigned new Raytheon Rectichargers offer three major improvements:



New Raytheon battery chargers feature ± 1% no-load to full-load regulation

1. ±1% no-load to full-load stabilization prevents battery overcharging, minimizes gassing, lengthens battery life.

2. No audible hum at output terminals.

3. Most compact units on the market—wall or rack mounted.

Automatically compensated for rectifier aging, Rectichargers offer high efficiency, completely automatic regulation. No moving parts and self-protecting circuitry assure minimum maintenance, long life. Single and three phase, 3-400 amps.

Built by Raytheon, supplied to you by your Stromberg-Carlson representative.

Did you know... that the expanded Stromberg-Carlson Telecommunication plant provides 800,000 square feet of floor space devoted exclusively to meeting your equipment and supply needs? These increased facilities enable us to serve you better than ever.

Distributed by

STROMBERG-CARLSON

A DIVISION OF GENERAL DYNAMICS CORPORATION

Sales Offices: Atlanta 6, Chicago 6, Kansas City 8, Rochester 3, San Francisco

Index

(Continued from page 75)

tion, 2-15-28; 3-1-20; 4-1-26. The Time Factor, 2-1-28. Watch Your Distance, 4-1-26. Winter Driving, 1-1-20.

SEPARATIONS:
NARUC Approves Separations Manual, 11-15-22.

SMALL COMPANIES:
Tonics For Small Exchanges, by J. T. Naylor, 8-15-41.

SUPERVISION:
How's Your Rating As A Boss? 4-1-37.

TAXES:
Committee Agrees On Transfer of Telephone Excise Taxes, 12-1-20.
Congressman Mills Urges Repeal of Communications Excise Taxes, 11-15-80.
NARUC Favors Repeal of Communications Excise Taxes, 11-15-30.
New Tax Guide, 2-15-14.
Still Around: Communication Excises, 4-15-12.
Tax Laws & Interpretations On Bell Pension Fund, 1-1-8.

TELEPHONE INDUSTRY:
"A More Vibrant Industry," by Donald C. Power, 10-15-55.
A Telephone Tells Its Story, 10-1-61.
A Vibrant Part of American Economy, by Clyde S. Bailey, 10-15-63.
Big Independent Telephone Growth In '56, 1-15-8.
Clouds Over Telephone Fair Return, by John F. Childs, 10-15-61.
Common Goals For Changing Times, by Frederick R. Kappel, 10-15-58.
From The Past Into the Future, by John S. Reed, 10-1-70.
"Hands In The Dark," by Phil Glanzer, 11-15-76.
"I'll Be There," by George Forbes, 11-15-62.
Independent Growth & Expansion, 2-15-14.
Independents Meet In Chicago, by John G. Reynolds, 10-15-51.
Independent Pioneers Announce Plans For Annual Meeting, 10-1-122.
"Interurbia" The Changing Face of America, 10-15-68.
New General Tel. Subsidiary to Give Financial Aid to Customers, 11-15-14.
NRECA Pres. Raps Trend Away From Co-ops, 11-15-17.
"Our Welcome Mat Is Out!" by Clyde S. Bailey, 10-1-45.
Past-Present-Future, by Leon F. Roberts, 9-1-33.
Planning Today For Tomorrow's Progress, by Donald C. Power, 5-15-43.
Regulation-Past-Present, Future, by Matt L. McWhorter, 10-1-53.
Security Is Our Future, by John P. Boylan, 10-1-47.
The Traffic Department Yesterday, Today, Tomorrow, by Ruth E. Richards, 10-1-66.
Today's Responsibilities, by E. H. Danner, 12-1-38.
USITA — Its Past, Present and Future, by Donald C. Power, 10-1-50.
USITA Plant Conference Report, by John S. Reed, 10-15-70.
Western Union Files New Bell System Agency Agreement, 11-15-14.
Are Telephone Operators Human?, by A. R. Stacey, 11-1-56.
High Speed Toll Ticketing Equipment, 2-1-54.
Improved Traffic Supervision Boosts Office Morale — Builds Employe Spirit, by Alton Steele, 6-15-39.
Problems and Objectives of Traffic Department Operations, 3-15-47.
"Toll-Ticketing Guideposts," by L. Gray Beck, 10-15-80.
Traffic Looks To The Future, 11-1-54.
Wrong Numbers, by Eleanor Howard, 1-1-38.

TRAINING:
Old Problems In New Clothes, by T. DeWitt Talmage, 12-1-35.

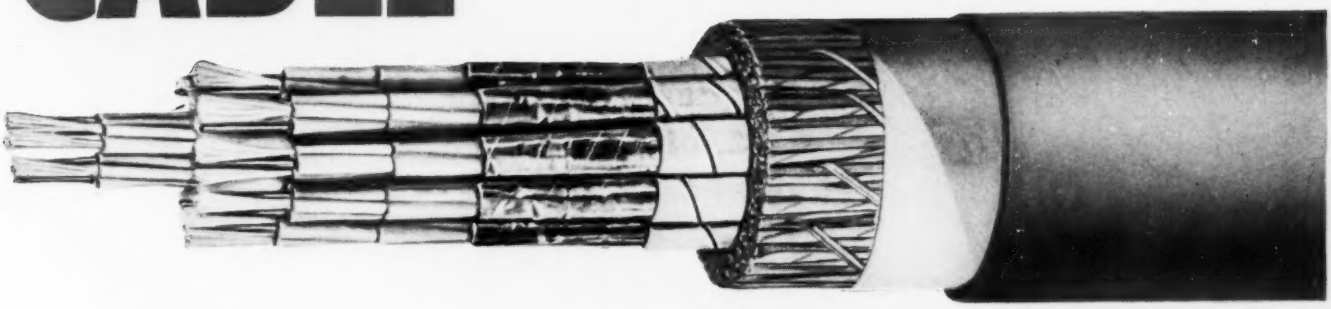
TRANSISTORS:
Bell Laboratory Develops New Transistor Process, 8-15-68.

WASHINGTON NEWSLETTER:
Accelerated Depreciation, 4-1-18. Anti-Trust Division Checks FCC On Proposed AT&T Tariffs, 5-1-22.
Bargaining Demands, 8-15-14. "Battle Of The Budget," 6-1-22. Battle Shaping Up On Frequencies above 890 Megacycles, 2-15-20. Big Question — What Is Or Is Not A Regulated Common Carrier?, 4-15-22. Busy Days Ahead, 9-1-22.
Civil Defense, 3-1-29. "Crystal Ball" — Taxes; 750-Station Exemption, The FCC, Radio Regulation, 1-15-16. Dept. of Agriculture Reports On Farm Telephones, 6-1-23. Equity Requirement For Co-ops, 1-1-14. Excise Tax Revenues, 11-1-23.
FCC Hearings On Microwave Due To Start May 20, 5-15-18. Federal Agencies, 10-15-16. Foreign Attachments, 3-1-28.
Highway Reimbursement Provision, 5-1-22. "Housing In The United States," 7-1-33. Humphrey, Senator, Speaks Up, 9-1-22.
"In Case Of Attack," 2-15-22. Industry Representative Appears At Hearing On "750-Station Exemption," 5-1-22.
"Jones Challenges Beirne," 6-1-23. "Living Up To Its Billing," 8-1-14. Low Power Communication Device Plan, 1-1-16.
Microwave Hearings, 9-1-18. Microwave Proceedings, 7-15-24. Minimum Wage, 4-1-22. Minimum Wage, 3-1-28. Mobilization, 5-15-22.
New WOC Policy, 7-15-69. 1956 Station Gain 3,947,000, 9-1-22.
Ohio Reversal, 7-15-20. Over-The-Horizon System, 10-15-18.
Package Proposal, 11-1-23. Private Line Services, 8-15-14.
REA Advisors Endorse REA's New, Liberalized Equity Requirements, 4-15-22. REA Makes Impressive Report, 1-15-18. REA's New Equity Requirements, 4-1-18. REA Reports On 1956 Operations, 2-15-22.
Separations Manual, 3-15-32. Separations Revisions, 1-1-16. Service Demand Continues, 2-1-14. Significant NLRB Decision, 7-15-20. S. W. Bell Claims Fraud, 4-15-26. Spectrum Usage, 1-1-16.
Tax Relief Proposals, 2-1-14. The 85th Congress, 9-15-16. The 890-940 Mc Band, 7-1-16. Tight Money Market, 2-1-14.
Under An Obligation, 11-1-22. Washington Outlook, 6-1-22.

NOW FROM GENERAL CABLE

UNIVERSAL FREQUENCY-RANGE CABLE

TO COVER PRESENT DAY COMMUNICATION SPECTRUM



VIDEO PAIR

Balanced broad band transmission circuits* for video and carrier—closed circuit TV—links to microwave stations —remote TV pickup—digital data transmission.

*Low signal to noise ratio
*Low attenuation
*Low shield resistance
*Low noise and cross talk levels
*Small phase distortion
*Low echo suppression

VOICE AND CARRIER

Telephone circuits.

SHEATH

Aluminum Lead
Stalpeth Alpeth
for aerial or duct installation

Also available with armor for direct earth burial or submarine use.

Distributed through:

AUTOMATIC ELECTRIC SALES CORPORATION
Northlake, Illinois

LEICH SALES CORPORATION
Chicago, Illinois

GENERAL CABLE CORPORATION,
420 Lexington Avenue, New York 17, N.Y.
Offices and Distributing Centers Coast-to-Coast

***for quality and service . . .* specify GENERAL CABLE**